Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

l(Currently amended). A method for attenuating the virulence of a bacterial pathogen <u>Staphylococcus aureus</u> or for inhibiting or reducing colonization by a bacterial pathogen <u>Staphylococcus aureus</u> in a patient in need thereof, comprising administering to the patient in need an effective amount of c-di-GMP, or a cyclic dinucleotide with the nucleotides in a head-to-tail arrangement, to attenuate the virulence of, or to inhibit or reduce colonization by, the bacterial pathogen <u>S. aureus</u>.

2 (Currently amended). The method of claim 1, wherein the attenuation of the virulence of a bacterial pathogen \underline{s} .

<u>aureus</u> comprises treating <u>a S. aureus</u> a bacterial infection.

Claim 3 (Cancelled).

4 (Currently amended). The method of claim 2, wherein said $\underline{S.\ aureus}\ \underline{bacterial}$ infection is mastitis, $\underline{a\ Staphylococcus}$ $\underline{S.\ aureus}$ infection of the mammary gland.

5 (Currently amended). The method of claim 2, wherein said $\underline{S. aureus}$ bacterial infection is treated by inhibiting $\underline{S.}$ \underline{aureus} microbial biofilm formation or by reducing the $\underline{S. aureus}$ bacterial biofilm already formed.

Appln. No. 10/565,591 Amd. dated December 9, 2010 Reply to Office Action of July 20, 2010

Claims 6-9 (Cancelled).

10 (Currently amended). The method of claim 5, wherein said $\underline{S.\ aureus\ bacterial}$ biofilm is on the skin or on a nasal or mucosal surface.

11 (Currently amended). The method of claim 2, further comprising administering an antibiotic compound which is effective in treating said $\underline{S.\ aureus\ bacterial}$ infection.

Claim 12 (Cancelled).

13 (Currently amended). The method of claim 1, wherein the inhibition or reduction of colonization of a bacterial pathogen <u>S. aureus</u> comprises treating a patient at risk of being colonized by a <u>S. aureus</u> bacterial pathogen or a patient already colonized by <u>S. aureus</u> bacterial pathogen.

14 (Currently amended). The method of claim 13, wherein the colonization of a bacterial pathogen $\underline{S.\ aureus}$ that is inhibited or reduced is on the skin or on a nasal or mucosal surface.

Claim 15 (Cancelled).

16(Original). The method of claim 13, wherein said patient is a carrier of Staphylococcus aureus.

17 (Currently amended). A method for inhibiting bacterial <u>Staphylococcus aureus</u> colonization and biofilm formation or for reducing colonization and pre-formed <u>Staphylococcus aureus</u> bacterial biofilm on a solid surface,

Appln. No. 10/565,591 Amd. dated December 9, 2010 Reply to Office Action of July 20, 2010

comprising exposing the solid surface to an effective amount of c-di-GMP or a cyclic dinucleotide—to inhibit bacterial $\underline{S.\ aureus}$ colonization and biofilm formation or to reduce $\underline{S.\ aureus}$ bacterial colonization and pre-formed biofilm on said solid surface.

18 (Original). The method of claim 17, wherein said solid surface is a solid surface of a medical device.

19(Original). The method of claim 18, wherein said medical device is implantable in or capable of attaching to a patient.

20 (Original). The method of claim 18, wherein said medical device is implanted in a patient or otherwise in contact with a patient.

Claims 21-27 (Cancelled).

28 (Previously presented). The method of claim 1, wherein said patient in need thereof is a mammal.

29 (Previously presented). The method of claim 1, wherein said patient in need thereof is human.

30 (Previously presented). The method of claim 1, wherein said patient in need thereof is a bird.